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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,527	01/07/2002	Masahide Teranoshita	016907-1358	5081
22428	7590	01/25/2006		
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER PHAM, THIERRY L	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/036,527	Applicant(s) TERANOSHITA, MASAHIRO	
	Examiner Thierry L. Pham	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 and 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-12 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/7/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

- This action is responsive to the following communication: Response to Restriction/Election Requirement filed on 12/28/05.
- Claims 1-20 are pending, wherein claims 4-8, and 13-19 are withdrawn from consideration.

Election/Restrictions

Applicant's election without traverse of Group I (claims 1-3, 9-12, 20) in the reply filed on 12/28/05 is acknowledged. Claims 4-8, and 13-19 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 12/28/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 9-10, 12, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi (US 20050088677).

Regarding claim 1, Hayashi discloses an image forming apparatus (printer 1500, fig. 1) connected to an external device (host computer 3000, fig. 1) by which a request for printing can be set by a print requesting person (user, par. 63) comprising:

- a storage device (external memory 14, fig. 1) having a plurality of storage areas (external memory 14 is divided into plurality mail boxes, fig. 15, par. 39 and par. 66) corresponding to a characteristic value (mail box name, fig. 15, pars. 64-65) allocated for

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each print requesting person (each mail box is allocated for a designated user, fig. 15, par. 65);

- an interface (interface 21, fig. 1) for receiving a print request from the external device;
- a controller (CPU 12, fig. 1) for, when receiving a print request from the external device via the interface (receiving print request from host computer 3000 via cable 21, fig. 1), storing print data in the print request into that storage area (storing print data into designated mail box, fig. 15, par. 63-66) in the storage area device which has been allocated the same characteristic value as the characteristic value (based upon same user name, i.e., print data from "hayashi" is stored in designated mail box 3, which is registered to "hayashi", fig. 15, pars. 63-66) in the print request; and
- an image forming unit (printer engine 17, fig. 1) for subjecting print data stored in the storage areas in the storage device to image formation processing (printer engine 17 for printing print data stored in mail boxes, fig. 4) on a storage area basis.

Regarding claim 3, Hayashi discloses the image forming apparatus according to claim 1, wherein the controller, when there is not storage area which has the same characteristic value as a characteristic value in a print request received from the external device set upon it, creates a storage area (memory controller 20 creates mail box to allocate the received print data, par. 39 and unused mail boxes can be used to allocate print data for new users, pars. 64-66) allocated the received characteristic value in the storage device and stores print data in the print request into the created storage area (new mail boxes for designated user can be created, par. 39 and pars.63-66, number of mail boxes can be created inherently depends upon available storage space).

Regarding claim 9, Hayashi discloses an image forming apparatus (printer 1500, fig. 1) connected to an external device (host computer 3000, fig. 1) by which a request for printing can be set by a print requesting person (user, par. 63) comprising:

- storage means (external memory 14, fig. 1) having a plurality of storage areas (external memory 14 is divided into plurality mail boxes, fig. 15, par. 39 and par. 66) corresponding to a characteristic value (mail box name, fig. 15, pars. 64-65) allocated for

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each print requesting person (each mail box is allocated for a designated user, fig. 15, par. 65);

- receiving means (interface 21, fig. 1) for receiving a print request from the external device;
- control means (CPU 12, fig. 1) for, when receiving a print request from the external device via the interface (receiving print request from host computer 3000 via cable 21, fig. 1), storing print data in the print request into that storage area (storing print data into designated mail box, fig. 15, par. 63-66) in the storage area device which has been allocated the same characteristic value as the characteristic value (based upon same user name, i.e., print data from “hayashi” is stored in designated mail box 3, which is registered to “hayashi”, fig. 15, pars. 63-66) in the print request; and
- image forming means (printer engine 17, fig. 1) for subjecting print data stored in the storage areas in the storage device to image formation processing (printer engine 17 for printing print data stored in mail boxes, fig. 4) on a storage area basis.

Regarding claim 10, Hayashi discloses an image forming system (image forming system as shown in fig. 1) having an external device (host computer 3000, fig. 1) by which a request for printing can be set by a print request person (user, 63) and an image forming apparatus (printer 1500, fig. 1) connected to the external device, the external device comprises:

- an operating device (printer driver 203, fig. 2) for setting a print request having a characteristic value (mail box for designated user, fig. 15, par. 63-66) allocated for a print requesting person and print data; and
- a first interface (PRTC 8, fig. 1) for sending a print request set by the operating device to the image forming apparatus (printer 1500, fig. 1), and the image forming apparatus comprises:
 - a storage device (external memory 14 is divided into plurality mail boxes, fig. 15, par. 39 and par. 66) having a plurality of storage areas corresponding to a characteristic value allocated for each print request person (each mail box is allocated for a designated user, fig. 15, par. 65);

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- a second interface (input unit 18, fig. 1) for receiving a print request from the external device (from host computer 3000, fig. 1);
- a controller (CPU 12, fig. 1) for, when receiving a print request from the external device via the interface, storing print data (storing print data into designated mail box, fig. 15, par. 63-66) in the print request into a storage area which has been allocated the same characteristic value as the characteristic value in the print request (based upon same user name, i.e., print data from “hayashi” is stored in designated mail box 3, which is registered to “hayashi”, fig. 15, pars. 63-66); and
- an image forming unit (printer engine 17, fig. 1) for subjecting print data stored in the storage areas in the storage device to image formation processing (printer engine 17 for printing print data stored in mail boxes, fig. 4) on a storage area basis.

Regarding claim 12, Hayashi discloses the image forming apparatus according to claim 10, wherein the controller, when there is not storage area which has the same characteristic value as a characteristic value in a print request received from the external device set upon it, creates a storage area (memory controller 20 creates mail box to allocate the received print data, par. 39 and unused mail boxes can be used to allocate print data for new users, pars. 64-66) allocated the received characteristic value in the storage device and stores print data in the print request into the created storage area (new mail boxes for designated user can be created, par. 39 and pars.63-66, number of mail boxes can be created inherently depends upon available storage space).

Regarding claim 20, Hayashi discloses an image forming system (image forming system as shown in fig. 1) having an external device (host computer 3000, fig. 1) by which a request for printing can be set by a print request person (user, 63) and an image forming apparatus (printer 1500, fig. 1) connected to the external device, the external device comprises:

- operating means (printer driver 203, fig. 2) for setting a print request having a characteristic value (mail box for designated user, fig. 15, par. 63-66) allocated for a print requesting person and print data; and

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- transmitting means (PRTC 8, fig. 1) for sending a print request set by the operating device to the image forming apparatus (printer 1500, fig. 1) , and the image forming apparatus comprises:
- storage means (external memory 14 is divided into plurality mail boxes, fig. 15, par. 39 and par. 66) having a plurality of storage areas corresponding to a characteristic value allocated for each print request person (each mail box is allocated for a designated user, fig. 15, par. 65);
- receiving means (input unit 18, fig. 1) for receiving a print request from the external device (from host computer 3000, fig. 1);
- controll means (CPU 12, fig. 1) for, when receiving a print request from the external device via the interface, storing print data (storing print data into designated mail box, fig. 15, par. 63-66) in the print request into a storage area which has been allocated the same characteristic value as the characteristic value in the print request (based upon same user name, i.e., print data from "hayashi" is stored in designated mail box 3, which is registered to "hayashi", fig. 15, pars. 63-66); and
- image forming means (printer engine 17, fig. 1) for subjecting print data stored in the storage areas in the storage device to image formation processing (printer engine 17 for printing print data stored in mail boxes, fig. 4) on a storage area basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi as described in claims 1 and 10 (respectively), and in view of Ogata et al (JP 2000-207163).

Regarding claims 2 & 11, Hayashi teaches a printer driver for designating a registered mailbox within a printer 1500 (fig. 1) for storing print data, but fails to teach

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and/or suggest the image forming apparatus comprising a timer for counting the current time, and wherein the controller, when receiving a print start time in addition to print data as a print request from the external device, stores the print data and the print start time into a storage area having a characteristic value that matches the characteristic value so that they are associated with each other, and the image forming unit subjects print data associated with the print start time that coincides with the current time to image formation processing on a storage basis.

Ogata, in the same field of endeavor for printing, teaches the image forming apparatus (printer 3, fig. 1) comprising a timer (timer 9, par. 14) for counting the current time (current time, par. 17), and wherein the controller, when receiving a print start time (print start time, abstract and par. in addition to print data as a print request from the external device (print start time is designated via using printer driver 2, abstract, fig. 1, par. 14-17, an example of print start time is shown in par. 17), stores the print data (print data, par. 14) and the print start time (print start time, abstract and par. 14) into a storage area (data storing unit 8 for storing print data and time data, fig. 1, par. 14) having a characteristic value that matches the characteristic value (fixed amount time, i.e., every 10 minutes, par. 20) so that they are associated with each other, and the image forming unit (print engine 10, fig.1, par. 14) subjects print data associated with the print start time that coincides with the current time (print start time coincides with current time, pars. 17-22) to image formation processing on a storage basis.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hayashi's image forming apparatus to include a timer for counting current time and print start time as taught by Ogata because of a following reason: (●) by designating a print start time associated with print data helps to improve the printer's efficiency (pars. 23-27), for example, lower priority print job can be set to be printed when printer widely available (i.e. such as nights, holiday, and etc).

Therefore, it would have been obvious to combine Hayashi with Ogata to obtain the invention as specified in claims 2 & 11.

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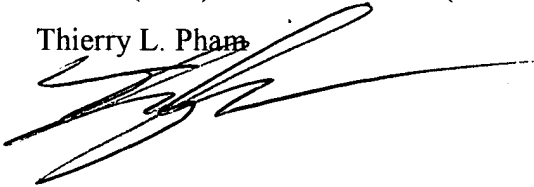
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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